### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015261 Address: 333 Burma Road **Date Inspected:** 28-Jun-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Wu Zhi Zhang No Yes **Inspected CWI report:** N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TRIAL ASSEMBLY YARD

ULTRASONIC INSPECTION

**OBG SEGMENT 9AE-9BE** ABF Request No: 06272010-3

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as the side panel splice weld between OBG segment 9AE and 9BE (Bike path side). Inspection was carried out on repair areas. The weld designations are as follows.

OBE9B-004 (OBG 9AE-9BE, S.P – Bike path side)

**ULTRASONIC INSPECTION** 

# WELDING INSPECTION REPORT

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#### **OBG SEGMENT 8CE**

ABF Request No: 06272010-2

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as the weld between bottom panel and side panel (Cross beam side) of OBG segment 8CE. The weld designations are as follows.

SEG048B-046 (OBG 8CE, B.P to S.P – C.B side)

#### ULTRASONIC INSPECTION

#### **OBG SEGMENT 8BW-8CW**

ABF Request No: 06272010-2

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as the weld between bottom panel and side panel (Cross beam side) of OBG segment 8BW and 8CW. The weld designations are as follows.

SEG047B-049, SEG045A-012 (OBG 8BW-8CW, B.P to S.P – C.B side)

#### TRIAL ASSEMBLY YARD

This QA Inspector randomly observed the following work in progress.

## **OBG SEGMENT 9AW-9BW**

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045196 performing Shielded Metal Arc Welding process for weld 043 located on PCMK SP490-001. ZPMC QC Mr. Zhu Zhong Hai monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-b-u2-FCM-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067572 performing Shielded Metal Arc Welding process for weld 032 located on PCMK SP668-001. ZPMC QC Mr. Zhu Zhong Hai monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-b-u2-FCM-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045221 performing Shielded Metal Arc Welding process for weld 0036 located on PCMK SP786-001. ZPMC QC Mr. Zhu Zhong Hai monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2112-FCM-1.

This QA Inspector observed ZPMC personnel performing snug bolt tightening with the help of torque wrench for lower chevron at PP72 cross beam side in OBG segment 9AW.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

Only general conversation was held between QA and QC

# **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer